

Satellite uplink station deployed during Operation Desert Shield

U.S. Air Force (Kit Thompson)



# Reconnaissance and Surveillance **Looking Deep**

By ROBERT W. CONE

**T**he joint force cannot fight and win if it is blind. In any future contingency, success rests on a few first principles: find the enemy, maintain contact, and determine his intent. Such imperatives spell out clear requirements that any reconnaissance and surveillance (R&S) organization must meet to perform across the range of military operations.

As the insurgencies in Iraq and Afghanistan developed and tactical headquarters became increasingly static, organic U.S. Army R&S assets were reinforced by national resources. In fact, the Army was fortunate and had first priority on many of the Nation's strategic intelligence assets, such as those provided by the Defense Intelligence Agency, Central Intelligence Agency,

and National Reconnaissance Office. As long as the U.S. strategic focus remained on transnational terrorist threats, the Army could rely on these assets to fill most, if not all, of the gaps within its own R&S infrastructure. Moreover, Army investments in tactical R&S assets (for example, Shadow unmanned aerial systems or organic reconnaissance squadrons within Brigade Combat Teams [BCTs]) gave our tactical commanders—brigade level and below—unprecedented R&S capability.

As the U.S. presence in Afghanistan concludes and the strategic rebalancing toward the Asia-Pacific region gathers momentum, the Army will no longer have first call on the Nation's strategic R&S capacity. As a result, much of the capability provided by national resources is returning its focus to providing accurate analyses of adversaries' strategic intent. Fortunately, the Army's investment in tactical R&S

assets ensures its ability to see and act on the close-in battlefield will persist. But the loss of these strategic assets, coupled with the inherent limitations of tactical assets, has left a huge operational-level gap in the Army's ability to contribute R&S capabilities at echelons above brigade. In any future conflict or contingency, Army and joint force operational commanders will find that they lack the ability to see beyond the tactical horizon, making it nearly impossible to determine enemy intent and counter it in a timely manner. Such blindness establishes conditions for battlefield surprise and risks defeat for U.S. forces.

In the past, the Army's contribution for operational-level R&S was provided by its Armored Cavalry Regiment (ACR). In the scenarios that we were likely to encounter during the Cold War, we found that the ACR was a nearly perfect tool. Unfortunately, the optimization of the ACR for a

---

General Robert W. Cone is Commanding General of U.S. Army Training and Doctrine Command.

Report Documentation Page				Form Approved OMB No. 0704-0188	
Public reporting burden for the collection of information is estimated to average 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington VA 22202-4302. Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to a penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number.					
1. REPORT DATE <b>2013</b>		2. REPORT TYPE		3. DATES COVERED <b>00-00-2013 to 00-00-2013</b>	
4. TITLE AND SUBTITLE <b>Reconnaissance and Surveillance: Looking Deep</b>				5a. CONTRACT NUMBER	
				5b. GRANT NUMBER	
				5c. PROGRAM ELEMENT NUMBER	
6. AUTHOR(S)				5d. PROJECT NUMBER	
				5e. TASK NUMBER	
				5f. WORK UNIT NUMBER	
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) <b>National Defense University, 260 Fifth Avenue, SW (Building 64, Room 2504), Fort Lesley J. McNair, Washington, DC, 20319</b>				8. PERFORMING ORGANIZATION REPORT NUMBER	
9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES)				10. SPONSOR/MONITOR'S ACRONYM(S)	
				11. SPONSOR/MONITOR'S REPORT NUMBER(S)	
12. DISTRIBUTION/AVAILABILITY STATEMENT <b>Approved for public release; distribution unlimited</b>					
13. SUPPLEMENTARY NOTES					
14. ABSTRACT					
15. SUBJECT TERMS					
16. SECURITY CLASSIFICATION OF:			17. LIMITATION OF ABSTRACT <b>Same as Report (SAR)</b>	18. NUMBER OF PAGES <b>3</b>	19a. NAME OF RESPONSIBLE PERSON
a. REPORT <b>unclassified</b>	b. ABSTRACT <b>unclassified</b>	c. THIS PAGE <b>unclassified</b>			

particular environment meant that it lacked the adaptability to meet many of the R&S challenges manifesting themselves across the current range of military operations. To meet these varied challenges, the Army built the Battlefield Surveillance Brigade (BfSB). Though these units proved highly effective in Iraq and Afghanistan, it is increasingly obvious that they are not robust enough to “fight for intent” and survive on the future battlefield, particularly in close contact with the enemy. Just as crucially, the BfSB, as well as other smaller maneuver R&S formations, lack the intelligence fusion and analysis capability that senior operational commanders require. As a result, the Army is making a new appraisal of the R&S capabilities required to support campaigns at echelons above brigade, as well as how to obtain them during a prolonged period of austerity.

### Purpose

The *raison d'être* of an operational-level R&S organization is fighting for intent. This idea goes far beyond just gaining and maintaining contact, which any tactically proficient maneuver unit can accomplish. Rather, it entails looking over the horizon not only to see an enemy's dispositions and activities, but also to interpret them. Although R&S missions will often result in contact and engagement with the enemy, fighting for information remains secondary to seeing the entire battlefield and then taking the resulting huge flow of data and turning it into a useful product that allows us to ascertain the enemy's intent.

Operational-level R&S organizations thus require the capability to make sense of what they collect. Our collection capabilities already provide more data than our headquarters and commanders can make sense of or use effectively. Such massive amounts of data are useless if they cannot be placed within the context of the mission and environment. Consequently, operational-level R&S organizations must be capable of providing at least an initial level of analysis that meets the needs of multiple supported headquarters simultaneously. Therefore, they need to have the technical resources and trained personnel to allow for the discovery of enemy intent, as well as to spot patterns, trends, and discontinuities. In short, operational-level R&S organizations require sufficient analytical capability to turn huge volumes of *data* into useful *infor-*

*mation* that commanders can take action on. Moreover, these organizations must provide this information with enough timeliness to get commanders inside the enemy's decision cycles—at the ever-quicken pace of

A commander will only be able to concentrate his forces if he can look into these areas and maintain the awareness and influence to prevent surprise and manage risk. This task will fall to Army R&S organizations that

---

*reconnaissance and surveillance allow the commander to shape the future battlefield to give U.S. forces the best chance of success*

---

battle. This capability gives R&S units the ability to integrate intelligence and operations, thereby enabling intelligence-driven activities within commands.

The conflicts in Iraq and Afghanistan have clearly demonstrated the tremendous power of this approach. By underpinning campaigns with fused intelligence analysis, the Army was able to adapt in order to defeat a versatile and changing enemy, and did so with a degree of precision previously unknown in warfare. Moreover, our intelligence dominance enabled commanders to anticipate the enemy, seize the initiative, and mitigate risk across the environment.

Finally, since the joint force will function anywhere along the range of military operations, R&S organizations must be capable of gaining information in a large number of different situations. Some situations will be low threat, but in some cases, the organization will have to fight for information. We can say with certainty that R&S organizations require sophisticated organic intelligence capability and some degree of combat-support capability. (The question is how much combat capability should be organic to the organization.)

### R&S and a Smaller Army

Few doubt that the Army will soon find itself substantially smaller than it is today. Whether we have 32 or 45 BCTs available, the American people still expect the Army to be ready for any contingency and to emerge victorious from any conflict. Doing so requires mitigating the operational and strategic risks that a smaller force entails. Effective R&S is essential to that effort.

On the battlefield, a commander must be able to concentrate effects to counter an enemy move or achieve desired purpose. In a smaller Army, any such concentration means other sectors—many of them important—will, of necessity, be denuded of forces.

require the capability to sustain themselves in prolonged combat situations. In fact, the necessity for a new operational-level R&S formation is specifically due to the current BfSB's inability to maneuver and conduct combat operations throughout the depth of the battlefield.

But an operational-level R&S organization cannot be limited to fulfilling Army needs. In almost all future engagements, the Army will find itself as part of a joint force, and likely a multinational one, and may be called upon to provide R&S capabilities to a joint task force commander. Accordingly, any future operational-level R&S organization must possess the capabilities necessary for plugging into a joint headquarters. That support could range from serving as the R&S organization for the joint force to providing niche capabilities that can work directly for headquarters.

Regional alignment can create a strong reinforcing relationship here. An operational-level R&S organization, with greater depth of intelligence capabilities as well as combat forces that can support partnered activities, is almost ideal for training, advisory, and assistance missions. The organization's intelligence capability allows it to maintain a much deeper understanding of the environment than traditional brigades. That focus allows it to rapidly prepare units to operate in the environment. Furthermore, the close relationship between combat battalions and the intelligence organizations should lead to better prepared units. Indeed, with regional alignment, these units' deep knowledge and unique sets of skills make them desirable for the early phases of many scenarios that combatant commanders face.

Reconnaissance and surveillance allow the commander to shape the future battlefield to give U.S. forces the best chance of success. Such shaping is impossible unless operational commanders can see what is



Battlefield Surveillance Brigade Soldiers speak with members of Afghan Border Police near Ulagay, Kandahar Province

U.S. Army (Phil Kernisan)

coming at them with enough clarity to determine the enemy's intent. That requires combat power, which allows R&S organizations to fight for information, protect widely dispersed assets in lower intensity operations, and support the regional partnership activities that provide insight only gained by physical proximity. Some combat power can be tailored based upon mission requirements, but clearly the operational-level R&S organization needs more organic combat power than the current BfSB.

### Solutions

What is clear is that the Army needs to provide the joint force an R&S organization that is *tailorable*. In some instances, the formation will need a great deal of combat power; in other cases, analytical capability will be central. Many missions will require a unique blend of specialized capabilities. The power in this formation will stem from its mission-specific adaptability. Unfortunately, an Army of 32 BCTs cannot afford to create new specialty formations. There simply is no latitude within the future force structure to build the modern-day equivalent of the Armored Cavalry Regiment. Worse, when a future conflict does erupt, the possibility of building effective operational-level R&S units on the fly by simply drawing in pieces of other units into an ad hoc formation is, at best, doubtful.

The requirements discussed, however, do seem to point to a BCT-based solution. BCTs have the right combat power and a

robust staff. If these BCTs are augmented—perhaps built around a Military Intelligence Battalion—they possess the inherent adaptability to meet the majority of R&S requirements. Based upon specific missions, they can receive additional units—such as chemical, fires, or aviation, when necessary—and possess the seniority of leadership to work directly for a joint force commander.

Two possible solutions have emerged in discussions. First, several current BCTs can be given a permanent on-order mission to assume operational-level R&S tasks. These BCTs would be augmented with additional resources and capabilities, particularly for the conduct of battlefield analytics. They would live together and build the habitual relationships that historically improve cooperation between units. Moreover, they would have adjusted training and leader development plans to ensure they maintain a specific minimum capability to conduct operational-level R&S missions.

The second possibility is to assign this mission, as necessary, to any available BCT and then build R&S capabilities into that unit during the Army Force Generation process. The Army would keep stores of up-to-date equipment on hand and plug it into the units as soon as they enter the process. Beyond the necessary equipment stores, the Army will have to invest in maintaining cadres of specialty personnel that can either plug into the selected BCT, or rapidly train that BCT in R&S tasks. By extension, this means the Army will keep on hand the rel-

evant doctrine and training material necessary to ease the organizational transition.

These findings are informative, but not comprehensive. There are fiscal and force structure realities that must be considered, too, and the ideal solution may not be affordable. Both solutions merit further examination through analysis, experimentation, and testing. The Maneuver Center of Excellence, in conjunction with the U.S. Army Training and Doctrine Command Analysis Center, is running a series of simulations and exercises to test both concepts thoroughly, and eventually we must test these ideas “in the dirt.”

A dangerous reconnaissance and surveillance gap is developing between what the joint force requires in the future and what the Army is likely to have available. If we are to succeed against the many dynamic and dangerous threats already rising in an increasingly chaotic global environment, seeing beyond the horizon and determining enemy intent will be critical. Moreover, as strategic R&S assets are redeployed to address other priorities, it is incumbent on the Army to replace these capabilities within its own structure. Unfortunately, given the austere economic situation, there are no easy answers. We can no longer solve problems by throwing money at them and building new resources. However, we can optimize existing organizations to ensure our commanders have the right mix of forces to prevent, shape, and, when necessary, win on any future battlefield. **JFQ**